



INAHTA Briefs

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Issue:	Should VA purchase operating room equipment for endovascular graft repair of aortic and carotid artery disease or establish referral centers for these minimally invasive vascular surgery procedures?
Title:	Endovascularly Placed Grafts for Infrarenal Abdominal Aortic Aneurysms: A Systematic Review of Published Studies of Effectiveness
Agency:	VA Technology Assessment Program, Office of Patient Care Services, Room D4-142, 150 S. Huntington Ave (11-T), Boston, MA 02130 Tel: 857-364-4469 Fax: 857-364-6587
Reference:	VA Technology Assessment Program Report May, 1998. www.va.gov/vatap
Aim:	To evaluate the effectiveness of endovascularly placed grafts for the repair of aortic and carotid artery disease.
Conclusions and results:	Twenty relevant studies, which were predominately case series, met inclusion criteria for review. Sixteen studies were of endovascular technologies for the treatment of infrarenal abdominal aortic aneurysms (AAA) and constituted the main focus of the review. The resulting evidence base is methodologically inadequate for determining if endovascular repair of infrarenal AAA result in lower morbidity, mortality and/or health care costs for: a) patients eligible for either endovascular repair or standard open surgical repair, b) patients ineligible for standard open surgical repair due to the presence of severe comorbid medical conditions, and c) patients who have small, asymptomatic nonexpanding AAA who are managed through watchful monitoring followed by standard open surgical repair when indicated.
Recommendations:	No definitive conclusions regarding the effectiveness of endovascular graft repair of infrarenal AAA can be drawn from the existing body of evidence. The critical question regarding the potential to over-utilize a minimally invasive treatment option in patients with marginal indications for surgery needs to be addressed.
Methods:	Comprehensive literature searches were conducted using Medline, HealthSTAR and Current Contents from 1993 thru 1998. Search strategies used the following terms: aortic aneurysm, aortic aneurysm, abdominal, carotid stenosis, stent and minimally invasive. The searches yielded 555 articles. Studies of effectiveness of endovascular repair of AAA published since 1990 in English with sufficient methods were included in the review.
Further research/reviews required:	Future research is needed to determine if endovascular repair is preferable to alternative interventions for patients eligible or ineligible for standard open surgical procedure or patients with small aneurysms.
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